

CLAIMS:

1. (canceled): A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

including with each of said plurality of tines a patch proximate a tip, said patch having a thickness that is greater than an adjoining undercut portion and wherein said plurality of tines are adapted to contact a pin during its insertion when an axial misalignment occurs in any direction between a center longitudinal axis of said pin and a center longitudinal axis of said plurality of tines.

2. (canceled): A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

forming at least a portion of each of said plurality of tines from an electrically conducting material and including with each of said plurality of tines a portion proximate a tip, said portion having a

thickness that is greater than an adjoining undercut portion and wherein said plurality of tines are adapted to contact a pin during its insertion when an axial misalignment occurs in any direction between a center longitudinal axis of said pin and a center longitudinal axis of said plurality of tines.

3. (canceled): A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

providing at each of said plurality of tines a first stage proximate a socket contact that includes a first inner diameter and is disposed at the socket contact at one end thereof and which extends therefrom to a distal end and where a second stage is attached and includes a second inner diameter at said one end thereof that is greater than the first inner diameter and wherein each of said plurality of tines includes a patch proximate a tip, said patch having a thickness that is greater than an adjoining undercut portion and wherein said plurality of tines are adapted to contact a pin during its insertion when an axial misalignment occurs in any

direction between a center longitudinal axis of said pin and a center longitudinal axis of said plurality of tines.

4. (currently amended): A low force electrical contact, comprising:

(a) a socket;

(b) a plurality of tines disposed in said socket;

(c) said plurality of tines adapted to receive a pin, wherein said pin includes a first center longitudinal axis that is not in parallel alignment with a second center longitudinal axis of said socket,

(d) means for connecting a wire to said socket; ~~and~~

wherein said plurality of tines are adapted to contact said pin during its insertion when an axial misalignment occurs in any direction between a center longitudinal axis of said pin and a center longitudinal axis of said plurality of tines;

and including an undercut portion in each of said tines
a predetermined distance from said tip;

wherein each of said tines includes a patch of material
that is adapted to contact a pin, said patch being
disposed intermediate said tip and said undercut
portion;

wherein a diametrically opposed pair of said patches of
material includes an inside diameter that is less than
an inside diameter of said undercut portion, and

wherein said socket includes a hood having a
predetermined inside diameter that surrounds said
plurality of tines, and wherein when said pin is mated
inside of said socket, said plurality of tines extend
radially outward a greater amount at said tip than at a
socket contact, and wherein a gap that exists
intermediate said plurality of tines and said inside
diameter of said hood is substantially identical along
the longitudinal length of said plurality of tines.

5. (original): The low force electrical contact of claim 4
wherein each of said tines includes a first stage and a
second stage, said first stage having a first wall thickness

that is thicker than a second wall thickness of said second stage that is disposed proximate to said first stage and which extends therefrom toward a tip of each tine.

6. (canceled): The low force electrical contact of claim 4 including an undercut portion in each of said tines a predetermined distance from said tip.

7. (currently amended): The low force electrical contact of claim ~~6~~ 4 wherein said undercut portion extends to said first stage.

8. (canceled): The low force electrical contact of claim 6 wherein each of said tines includes a patch of material that is adapted to contact a pin, said patch being disposed intermediate said tip and said undercut portion.

9. (currently amended): The low force electrical contact of claim ~~8~~ 4 wherein said patch of material includes a greater thickness of material than said undercut portion.

10. (canceled): The low force electrical contact of claim 8 wherein a diametrically opposed pair of said patches of material includes an inside diameter that is less than an inside diameter of said undercut portion.

11. (original): The low force electrical contact of claim 4 wherein each of said plurality of tines is adapted to extend radially away from a center longitudinal axis.

12. (original): The low force electrical contact of claim 7 wherein each of said plurality of tines is adapted to make contact with said pin along a portion of the longitudinal length of each of said plurality of tines proximate a tip of each of said tines when said pin is inserted into said socket.

13. (currently amended): The low force electrical contact of claim 4 wherein each of said plurality of tines is machined wherein a tip of each of said plurality of tines is normally disposed closer to a center of said socket when said socket is not mated with a pin than is a second end of each of said

plurality of tines that is disposed distally from said tip, said second end being disposed at an opposite end of each of said plurality of tines than said tip.

14. (currently amended): The low force electrical contact of claim 4 wherein each of said plurality of tines includes a first outside diameter that is proximate a tip and a second outside diameter that is greater than said first outside diameter, said second outside diameter being disposed distally from said tip, and wherein each of said plurality of tines progressively increases in the outside diameter from said tip to ~~said~~ a distal end said distal end being disposed at an opposite end of each of said plurality of tines than said tip.

15. (canceled): The low force electrical contact of claim 10 wherein said socket includes a hood having a predetermined inside diameter that surrounds said plurality of tines, and wherein when said pin is mated inside of said socket, said plurality of tines extend radially outward a greater amount at said tip than at a socket contact, and wherein a gap that exists intermediate said plurality of tines and said inside

diameter of said hood is substantially identical along the longitudinal length of said plurality of tines.

16. (previously amended): The low force electrical contact of claim 4 wherein said socket is adapted to accommodate an angular misalignment of a first center longitudinal axis of said pin with respect to a second center longitudinal axis of said socket.

17. (original): The low force electrical contact of claim 16 wherein said angular misalignment is equal to or less than three degrees in magnitude.